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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/750,648	12/31/2003	William H. Eby	1421-146	1647	
32905 75	590 11/03/2005		EXAMINER		
JONDLE & ASSOCIATES P.C.			MCELWAIN, ELIZABETH F		
	CANYON ROAD SUITE 230 CK, CO 80108	0	ART UNIT	PAPER NUMBER	
CASTEE ROO			1638		
			DATE MAIL ED. 11/02/200	DATE MAILED: 11/02/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

1						
		Application No.	Applicant(s)			
		10/750,648	EBY, WILLIAM H.			
	Office Action Summary	Examiner	Art Unit			
		Elizabeth F. McElwain	1638			
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet with the c	orrespondence address			
THE - Exte after - If the - If NC - Failt Any	MORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. ensions of time may be available under the provisions of 37 CFR 1.13 r SIX (6) MONTHS from the mailing date of this communication. e period for reply specified above is less than thirty (30) days, a reply of period for reply is specified above, the maximum statutory period we ure to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing led patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tin within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).			
Status						
1)	Responsive to communication(s) filed on	•				
		action is non-final.				
3)						
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposit	ion of Claims					
4)⊠	4)⊠ Claim(s) <u>1-29</u> is/are pending in the application.					
	4a) Of the above claim(s) is/are withdrawn from consideration.					
5)□	Claim(s) is/are allowed.					
6)⊠	☑ Claim(s) <u>1-29</u> is/are rejected.					
8)[Claim(s) are subject to restriction and/or	r election requirement.				
Applicat	ion Papers					
9)	The specification is objected to by the Examine	r.				
10)	10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.					
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
_	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11)	The oath or declaration is objected to by the Ex-	aminer. Note the attached Office	Action or form PTO-152.			
Priority (ınder 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:						
	1. Certified copies of the priority documents have been received.					
	2. Certified copies of the priority documents have been received in Application No					
	3. Copies of the certified copies of the priori		d in this National Stage			
application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.						
	The state of the s	s. and domined dopied flot receive	u.			
Attacher	e(a)					
Attachmen 1) ⊠ Notic	t(s) e of References Cited (PTO-892)	4) 🔲 Interview Summary	(PTO.413)			
2) 🔲 Notic	e of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	te			
	mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date <u>4/15/05</u> .	5) Notice of Informal Pa 6) Other:	atent Application (PTO-152)			

DETAILED ACTION

Claims 1-29 are pending.

Claims 1, 6, 22, 23 and 28 are objected to for the inclusion of a blank line where the ATCC Accession number should be.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-29 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 6, 22, 23 and 28, and claims 2-5, 7-21, 24-27 and 29 dependent thereon, are indefinite in the recitation of "seed of soybean line designated S030157", given that a name does not clearly identify the claimed soybean cultivar and seed, and does not set forth the metes and bounds of the claimed invention. Since the name S030157 is not known in the art, the use of said name does not carry art recognized limitations as to the specific characteristics or essential characteristics which are associated with that denomination. In addition, the name appears to be arbitrary and the specific characteristics associated therewith could be modified, as there is no written description of the soybean plant that encompasses all of its traits. Amending the claims to recite the ATCC deposit number would overcome the rejection.

Claim 28 is indefinite in the recitation of "A method of modifying fatty acid metabolism or modified carbohydrate metabolism into soybean", since it is unclear what this means.

Claims 28 and 29 are indefinite and confusing given that the claims state that the resulting plant will comprise "the nucleic acid molecule and has all of the physiological and morphological characteristics of soybean line S030157 listed in Table 1". However, the

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existence of the introduced nucleic acid molecule suggests that there would be at least one other characteristic or modified characteristic in the resultant plant, which would not be consistent with the wording of the claim.

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 8 and 9 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The claims are drawn to hybrid soybean seeds and plants. The claims are drawn to hybrid soybean seeds and plants produced from said, wherein one of the parents is S030157 and the other parent plant is not specified. The hybrid plants are not defined by genomic structure or by phenotypic characteristics, and it is unclear what characteristics of S030157 would be present in the claimed hybrid seeds and plants. Due to the segregation and recombination of the parent genomes during meiosis, one cannot predict what traits or combinations of traits will be passed on to any given hybrid seed and plant. In fact, *each* hybrid seed derived from a cross between two genetically distinct parent plants will have unique combinations of characteristics.

Therefore, the claimed invention lacks an adequate written description.

See *University of California v. Eli Lilly*, 119 F.3d 1567, 43 USPQ 2d 1405 (Fed, Cir. 1997), where it states: "[a] written description of an invention involving a chemical genus, like a description of a chemical species, 'requires a precise definition, such as by structure, formula,

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[or] chemical name,' of the claimed subject matter sufficient to distinguish it from other materials."

Therefore, given the lack of written description in the specification with regard to the structural and physical characteristics of the claimed compositions, one skilled in the art would not have been in possession of the genus claimed at the time this application was filed.

Claims 1-29 are rejected under 35 USC 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Since the seed claimed is essential to the claimed invention, it must be obtainable by a repeatable method set forth in the specification or otherwise be readily available to the public. If a seed is not so obtainable or available, the requirements of 35 U.S.C. 112 may be satisfied by a deposit thereof. The specification does not disclose a repeatable process to obtain the exact same seed in each occurrence and it is not apparent if such a seed is readily available to the public. It is noted that applicants intend to deposit seeds for S030157 at the ATCC, but there is no indication that the seeds have been deposited and there is no indication in the specification as to public availability. If the deposit of these seeds is made under the terms of the Budapest Treaty, then an affidavit or declaration by the applicants, or a statement by an attorney of record over his or her signature and registration number, stating that the seeds will be irrevocably and without restriction or condition released to the public upon the issuance of a patent would satisfy the deposit requirement made herein. A minimum deposit of 2500 seeds is considered sufficient in the ordinary case to assure availability through the period for which a deposit must by maintained.

If the deposit has not been made under the Budapest Treaty, then in order to certify that the deposit, meets the criteria set forth in 37 CFR 1.801-1.809, applicants may provide assurance

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of compliance by an affidavit or declaration, or by a statement by an attorney of record over his or her signature and registration number showing that

(a) during the pendency of the application, access to the invention will be afforded to the Commisioner upon request;

- (b) all restrictions upon availability to the public will be irrevocably removed upon granting of the patent;
- (c) the deposit will be maintained in a public depository for a period of 30 years or 5 years after the last request or for the enforceable life of the patent, whichever is longer; (d) the viability of the biological material at the time of deposit will be tested (see 37 CFR 1.807); and

(e) the deposit will be replaced if it should ever become inviable.

In addition, with regard to claim 20, the specification does not provide support for transforming the claimed soybean plant with a transgene encoding a stearyl-ACP desaturase, but rather teaches transforming the claimed soybean plant with DNA encoding an antisense sequence of a stearyl-ACP desaturase. Amendment of the claim to reflect what is disclosed in the specification would overcome the rejection.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 9-22 are rejected under 35 U.S.C. § 102 (b) as anticipated by or, in the alternative, under 35 U.S.C. § 103 as obvious over U.S. Patent 6,103,957.

Applicants have claimed a plant derived from S030157 soybean after at least one cross and using unspecified second parents, and a method of crossing using said plants, including up to seven generations of crosses and including introduction of herbicide, insect or disease resistance. However, it appears that the claimed plants and seeds are the same as the prior art soybean cultivar of U.S. Patent 6,103,957, given that each has the same characteristics, including: Roundup resistance, purple flowers, brown pod, and imperfect black hilum, for example. Alternatively, if the claimed plants and seeds of S030157 are not identical to the soybean of U.S. Patent 6,103,957, then it appears that the soybean of U.S. Patent 6,103,957 only differs from the claimed plants and seeds due to minor morphological variation, wherein said minor morphological variation would be expected to occur in different progeny of the same cultivar, and wherein said minor morphological variation would not confer a patentable distinction to S030157. Thus the claimed invention was *prima facie* obvious as a whole to one of ordinary skill in the art at the time it was made, if not anticipated by U.S. Patent 6,103,957 soybean.

No claims are allowed.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth F. McElwain whose telephone number is (571) 272-0802. The examiner can normally be reached on increased flex time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, W. Gary Jones can be reached on (571) 272-0745. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Elizabeth F. McElwain, Ph.D.

Primary Examiner Art Unit 1638

EFM